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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,916	02/14/2002	Matthias Weiss	A34942	1714
21003	7590	08/02/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			TSAL, HENRY	
			ART UNIT	PAPER NUMBER
			2183	

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,916

Applicant(s)

WEISS ET AL.

Examiner

Henry W.H. Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/12/02 and 5/28/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/14/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.

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- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

2. Claims 6, and 7 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 6 and 7 have not been further treated on the merits.

3. Claims 1-5, and 9 are objected to because of the following informalities:

in claim 1, lines 12-13, and lines 19-20, it is suggested to change "-determined by a reading row number-" to
", determined by a reading row number, "; and
change "-effected in this way-" to

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", determined by a reading row number, ". Similar problems exist in the other claim 5;

in claim 5, line 7, the meaning of "the instruction word memory page to be called" is unclear. Therein, it is suggested to change "called" to -selected-. Similar problems exist in the other claim 5, lines 27-28; and

in claim 9, line 2, "a block length register a read pointer register" should read -a block length register, a read pointer register-.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, lines 19-20, it is not clear what is meant by "after generation --effected in this way-- of an instruction word" since which way is referred to by "this way" was not defined. Similar problems exist in the other claim 5.

In claim 8, lines 3-4, it is not clear what is meant by "having an instruction word memory assigned to these functional units"; and lines 11-12, it is not clear what is meant by "the instruction word is assigned a generation unit" since the definition of "assigned" is unclear. Note "assigned" is not a verb for establishing a structural relationship between two elements. Similar problems exist in the other claim 9, lines 6-7.

In claim 9, line 8, the term of "ring countering properties" lacks proper antecedent basis since it was not described or defined previously.

Applicant is required to review the claims and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Desal et al. (U.S. Patent No. 5,347,638) (hereafter referred to as Desal et al.'638).

Referring to claim 8, Desal et al.'638 discloses as claimed arrangement for the generation of instruction words (inside register file 202, see Fig. 3) for driving functional units (certainly existing in the Desal et al.'638's system for data operations) in a processor having functional units, having an instruction word memory (such as the instruction queue of the Desal et al.'638's system) assigned to these functional units, and having an instruction word buffer (register file 202, see Fig. 3) for storing already generated instruction words (the words after decoding) having a width (14 bits, see col. 6, lines 32-34) which is at least equal to the bit width (14 bits, see col. 6, lines 32-34) of the instruction word, the instruction

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word buffer (register file 202, see Fig. 3) comprising a memory with random or fixed-programmed row-by-row access, characterized in that the instruction word memory (such as the instruction queue of the Desal et al.'638's system) is assigned a generation unit (such as a decoder of the Desal et al.'638's system).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desal et al. (U.S. Patent No. 5,347,638) (hereafter referred to as Desal et al.'638) in view of Miller (U.S. Patent No. 5,079,639) (hereafter referred to as Miller'639).

As to claim 9, Desal et al.'638 also discloses: a read pointer register (R. pointer register 280, see Fig. 3) and a write pointer register (W. pointer register 270, see Fig. 3) are arranged in the generation unit (such as a decoder of the Desal et al.'638's system).

Desal et al.'638 discloses the claimed invention except for: a block length register, the read pointer register being assigned a read pointer up/down counter and the write pointer register being assigned a write pointer up/down counter, whose ring counting properties are determined by the content of the block length register.

Miller'639 discloses a system comprising a block length register (the register inside RAM and connected with counter 216 by bus 220, see Fig. 4, see also col.5, lines 29-31), the read pointer register (212 or 228, see Fig. 4) being assigned a read pointer up/down counter (216 see Fig. 4) and the write pointer

register (286, see Fig. 5) being assigned a write pointer up/down counter (266, see Fig. 4), whose ring counting properties (the counter values are broadly and reasonably interpreted as the ring counting properties) are determined by the content (such as the bits or signals outputted from RAM to affect the counters 266 and 216, see Figs. 4 and 5) of the block length register (the register inside RAM and connected with counter 216 by bus 220, see Fig. 4, see also col.5, lines 29-31). .

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Desal et al.'638's system to comprise: a block length register, the read pointer register being assigned a read pointer up/down counter and the write pointer register being assigned a write pointer up/down counter, whose ring counting properties are determined by the content of the block length register, as taught by Miller'639, in order to randomly read or write the instruction word buffer for the Desal et al.'638's system (see col. 13, claim 3 and col. 14, claim 4).

Allowable Subject Matter

9. Claims 1-5 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, and the objections set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter: Desal et al.'638 and Miller'639, the closest references, and the other prior art do not teach or fairly suggest: at least, the program words comprising the fractionation such as the width of an instruction word part from a program code for controlling the generation of instruction words in combination with all of the other limitations of claims 1 and 5. Besides, the combination is not obvious.

Response to Amendment

10. Note Applicant's amendment to claims 10, 15, and 19 mailed 8/12/02 are not entered since the original claims (claims 1-9) do not include claims 10, 15, and 19.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure wherein

Sindalovsky'265 teaches using write pointer register and read pointer register for facilitating access a memory device; and Simpson discloses a FIFO memory system using write pointer register 14 and read pointer register 16 for accessing the main memory RAM.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (703) 308-7600. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Eddie Chan, can be reached on (703) 305-9712. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **TC 2100 receptionist whose telephone number is (703) 305-3900.**

13. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into **the Group at fax number: 703-872-9306.**

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This practice may be used for filing papers not requiring a fee.

It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account.

Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.

A handwritten signature in cursive script, reading "Henry Tsai".

HENRY W. H. TSAI
PRIMARY EXAMINER

~~June 29, 2004~~

July 26, 2004